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	Search Res Terms L1 same (purif? or isolat? or	Documents	
Database:	US Patents Full-Text Database US Pre-Grant Publication Full-Text Database JPO Abstracts Database EPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins		
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DATE: Tu	nesday, May 20, 2003 Printable Copy	Create Case	
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<u>L2</u>	L1 same (purif? or isolat? or charact?)	12	<u>L2</u>
<u>L1</u>	(phospholipase A2)	1855	<u>L1</u>

END OF SEARCH HISTORY

## WEST

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## Search Results - Record(s) 1 through 12 of 12 returned.

1. Document ID: US 20030040088 A1

L2: Entry 1 of 12

File: PGPB

Feb 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030040088

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030040088 A1

TITLE: Secreted protein HT5GJ57

PUBLICATION-DATE: February 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ruben, Steven M.	Olney	MD	US	
Komatsoulis, George	Silver Spring	MD	US	•
Duan, Roxanne D.	Bethesda	MD	US	
Rosen, Craig A.	Laytonsville	MD	US	
Moore, Paul A.	Germantown	MD	US	
Shi, Yanggu	Gaithersburg	MD	US	
LaFleur, David W.	Washington	DC	US	
Ebner, Reinhard	Gaithersburg	MD	US	
Olsen, Henrik S.	Gaithersburg	MD	US	
Brewer, Laurie A.	St. Paul	MN	US	
	Rockville	MD	US	
Florence, Kimberly A.	Gaithersburg	MD	us	
Young, Paul E.	Cincinnati	OH	US	
Mucenski, Michael	Florence	MA	US	
Endress, Gregory A.		VA	US	
Soppet, Daniel R.	Centreville	٧A	00	

US-CL-CURRENT:  $\underline{435/183}$ ;  $\underline{435/320.1}$ ,  $\underline{435/325}$ ,  $\underline{435/6}$ ,  $\underline{435/69.1}$ ,  $\underline{530/350}$ ,  $\underline{536/23.2}$ 

Full Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image |

☐ 2. Document ID: US 20030017500 A1

L2: Entry 2 of 12

File: PGPB

Jan 23, 2003

PGPUB-DOCUMENT-NUMBER: 20030017500

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030017500 A1

TITLE: Secreted protein HT5GJ57

PUBLICATION-DATE: January 23, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ruben, Steven M.	Olney	MD	US	
Komatsoulis, George	Silver Spring	MD	US	
Duan, Roxanne D.	Bethesda	MD	US	
Rosen, Craig A.	Laytonsville	MD	US	
Moore, Paul A.	Germantown	MD	US	
Shi, Yanggu	Gaithersburg	MD	US	
LaFleur, David W.	Washington	DC	US	
Ebner, Reinhard	Gaithersburg	MD	US	
Olsen, Henrik	Gaithersburg	MD	US	
Brewer, Laurie A.	St. Paul	MN·	US	
Florence, Kimberly A.	Rockville	MD	US	
Young, Paul	Gaithersburg	MD	US	
Mucenski, Michael	Cincinnati	OH	US	
Endress, Gregory A.	Florence	MA	US	
Soppet, Daniel R.	Centreville	VA	US	

US-CL-CURRENT: 435/7.1; 530/388.15, 530/388.26

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMIC Draw Desc Image

3. Document ID: US 20020182652 A1

L2: Entry 3 of 12

File: PGPB

Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020182652

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020182652 A1

TITLE: Proteomic analysis

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

	CITY	STATE	COUNTRY	RULE-47
NAME	CIII	DIAID	COUNTRY	
Cravatt, Benjamin F.	La Jolla	CA	US	
Sorensen, Erik	San Diego	CA	US	
Patricelli, Matthew P.	San Diego	CA	US	
Lovato, Martha	San Diego	CA	US	
Adam, Gregory	San Diego	CA	បន	

US-CL-CURRENT: 435/7.9; 436/518

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMIC Drawit Desc Image

☐ 4. Document ID: US 20020086386 A1

L2: Entry 4 of 12

File: PGPB

Jul 4, 2002

PGPUB-DOCUMENT-NUMBER: 20020086386

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020086386 A1

TITLE: B-catenin assays, and compositions therefrom

PUBLICATION-DATE: July 4, 2002

INVENTOR-INFORMATION:

STATE COUNTRY CITY NAME UT US Salt Lake City Kamb, Carl Alexander UT US Salt Lake City Yoo, Sanghee US UT Salt Lake City Garcia-Guzman, Miguel UT US Salt Lake City Pierce, Michael Leslie

US-CL-CURRENT: 435/183; 435/320.1, 435/325, 435/69.1, 530/350

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMC Draw Desc Image

RULE-47

5. Document ID: US 20020081688 A1

L2: Entry 5 of 12

File: PGPB

Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020081688

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020081688 A1

TITLE: Retinoid pathway assays, and compositions therefrom

PUBLICATION-DATE: June 27, 2002

INVENTOR-INFORMATION:

RULE-47 COUNTRY STATE CITY NAME HS UT , Salt Lake City Kamb, Carl Alexander US UT Midway Richards, Burt Timothy US CO Boulder Karpilow, Jon

US-CL-CURRENT: 435/189; 435/320.1, 435/325, 435/6, 435/69.1

Full Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments

KWAC Drawa Descriptinage

☐ 6. Document ID: US 20020064799 A1

L2: Entry 6 of 12

File: PGPB

May 30, 2002

PGPUB-DOCUMENT-NUMBER: 20020064799

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020064799 A1

TITLE: Proteomic analysis

PUBLICATION-DATE: May 30, 2002

INVENTOR-INFORMATION:

RULE-47 COUNTRY STATE CITY NAME US CA La Jolla Cravatt, Benjamin F. US CA San Diego Sorensen, Erik CA US San Diego Patricelli, Matthew P. CA US San Diego Lovato, Martha CA US San Diego Adam, Gregory

US-CL-CURRENT: 435/7.1; 546/339, 548/570, 568/25

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMC Draw Desc Image

7. Document ID: US 20020045194 A1

L2: Entry 7 of 12

File: PGPB

Apr 18, 2002

PGPUB-DOCUMENT-NUMBER: 20020045194

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020045194 A1

TITLE: Proteomic analysis

PUBLICATION-DATE: April 18, 2002

INVENTOR-INFORMATION:

NAME Cravatt, Benjamin F. Sorensen, Erik Patricelli, Matthew P. Lovato, Martha	CITY La Jolla San Diego San Diego San Diego	STATE CA CA CA	COUNTRY US US US US	RULE-47
Lovato, Martha Adam, Gregory	San Diego	CA	US	

US-CL-CURRENT: 435/7.9

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMIC Draw Desc Image

S. Document ID: US 20020040275 A1

L2: Entry 8 of 12

File: PGPB

Apr 4, 2002

PGPUB-DOCUMENT-NUMBER: 20020040275

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020040275 A1

TITLE: Proteomic analysis

PUBLICATION-DATE: April 4, 2002

INVENTOR-INFORMATION:

NAME Cravatt, Benjamin F. Sorensen, Erik Patricelli, Matthew P. Lovato, Martha	CITY La Jolla San Diego San Diego San Diego San Diego	STATE CA CA CA CA CA	COUNTRY US US US US US US	RULE-47
Adam, Gregory	San Diego	CA	05	

US-CL-CURRENT:  $\frac{702}{19}$ ;  $\frac{435}{7.1}$ ,  $\frac{435}{7.2}$ 

Full Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |

KWAC Draw Desc Image

☐ · 9. Document ID: US 6534631 B1 Mar 18, 2003 File: USPT L2: Entry 9 of 12 US-PAT-NO: 6534631 DOCUMENT-IDENTIFIER: US 6534631 B1 TITLE: Secreted protein HT5GJ57 Full Title Ctation Front Review Classification Date Reference Sequences Attachments HAMIC Draw Desc Image ☐ 10. Document ID: US 5229367 A Jul 20, 1993 File: USPT L2: Entry 10 of 12 US-PAT-NO: 5229367 DOCUMENT-IDENTIFIER: US 5229367 A TITLE: Antiinflammatory peptide derived from human lipocortin V Full Title Citation Front Review Classification Date Reference Sequences Attachments KWMC Draw Desc Image ☐ 11. Document ID: JP 07011283 A Jan 13, 1995 File: JPAB L2: Entry 11 of 12 PUB-NO: JP407011283A DOCUMENT-IDENTIFIER: JP 07011283 A TITLE: METHOD FOR PURIFYING OIL AND FAT Full Title Citation Front Review Classification Date Reference Sequences Attachments KNAC Draw Desc Image 12. Document ID: JP 08168390 A Jul 2, 1996 File: DWPI L2: Entry 12 of 12 DERWENT-ACC-NO: 1996-357246 DERWENT-WEEK: 199636 COPYRIGHT 2003 DERWENT INFORMATION LTD TITLE: Prepn of glyceride contg highly unsatd fatty acid in high concn - by fatty acid and reacting with lipase

contacting yolk phospholipid with phospholipase A2, adding glycerol to extracted

Title Citation Front Review Classification Date Reference Sequences Attachments	KMAC Draw Desc Image
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INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 13:08:02 ON
20 MAY 2003

SEA (PHOSPHOLIPASE A2)

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FILE ADISINSIGHT 34 FILE ADISNEWS 1 FILE AGRICOLA 426 FILE ANABSTR 114 FILE AQUASCI 38 FILE BIOBUSINESS 123 FILE BIOCOMMERCE 48 FILE BIOSIS 11172 FILE BIOTECHABS 345 FILE BIOTECHDS 345 FILE BIOTECHNO 3156 FILE CABA 1152 FILE CANCERLIT 1664 FILE CAPLUS 14742 FILE CEABA-VTB 82 FILE CEN 6 FILE CIN 30 FILE CONFSCI 144 FILE CROPU 29 FILE DDFB 188 FILE DDFU 1498 FILE DGENE 1975 FILE DRUGB 188 FILE DRUGNL 27 FILE DRUGU 1790 FILE DRUGUPDATES 34 FILE EMBAL 8 FILE EMBASE 11205 FILE ESBIOBASE 501 FILE FEDRIP 258 FILE FOREGE 1 FILE FROSTI 63 9 FILE FSTA FILE GENBANK 2064 FILE HEALSAFE 2 FILE IFIPAT 356 FILE JICST-EPLUS 1010 FILE KOSMET 12 FILE LIFESCI 2140 FILE MEDICONF 9 FILE MEDLINE 10187 49 FILE NIOSHTIC 72 FILE NTIS FILE OCEAN 13 FILE PASCAL 1626 FILE PHAR 68 FILE PHARMAML 10 29 FILE PHIN FILE PROMT 85

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FILE SÇISEARCH

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10 FILE SYNTHLINE FILE TOXCENTER 9242 FILE USPATFULL 912 FILE USPAT2 26 FILE VETU 18 FILE WPIDS 643 643 FILE WPINDEX QUE (PHOSPHOLIPASE A2) L1FILE 'CAPLUS, EMBASE, BIOSIS, MEDLINE, TOXCENTER, SCISEARCH, BIOTECHNO, LIFESCI' ENTERED AT 13:09:07 ON 20 MAY 2003 1954 S L1 AND (LIPOPROTEIN) L20 S L2 AND PHOSPHOTIDYLCHOLINE L310 S L2 AND (SN-2 ESTER) L44 DUP REM L4 (6 DUPLICATES REMOVED) L5 618 S L2 AND (ISOLAT? OR PURIF? OR CHARACT?) L6 1 S L6 AND (SN-2 ESTER) L7 267 S L6 AND PY<1993

L8

COPYRIGHT 2003 CSA ANSWER 264 OF 267 LIFESCI

ACCESSION NUMBER:

90:65877 LIFESCI

TITLE:

Enhanced binding of phospholipase-A sub(2)-modified low

density lipoprotein by human adipocytes.

AUTHOR:

Natarajan, M.K.; Fong, B.S.; Angel, A.

CORPORATE SOURCE:

Rm. 7368, Med. Sci. Build., Univ. Toronto, Toronto, Ont.

M5S 1A8, Canada

SOURCE:

BIOCHEM. CELL BIOL., (1990) vol. 68, no. 11, pp.

1243-1249.

DOCUMENT TYPE:

Journal

FILE SEGMENT:

М

English

LANGUAGE:

English; French SUMMARY LANGUAGE:

Recognition of low density lipoprotein (LDL) by human adipocytes is not dependent on the classical LDL (apoprotein B-E) receptor. To assess whether LDL phospholipids have a role in adipocyte-LDL interactions, binding studies were carried out with human LDL modified with cobra venom phospholipase A sub(2) (PLA sub(2)) and freshly isolated adipocytes and purified adipocyte plasma membranes prepared from surgical biopsies. LDL incubated with PLA sub(2) showed increased monoacylphospholipid content, decreased diacylphospholipid content, and increased anodic migration on agarose gel electrophoresis.

COPYRIGHT 2003 CSA ANSWER 263 OF 267 LIFESCI

ACCESSION NUMBER:

91:58111 LIFESCI

TITLE:

Characterization of several phospholipase

activities and diacylglycerol/2-monoacylglycerol lipases in

rat alveolar macrophages.

AUTHOR:

Errasfa, M.

CORPORATE SOURCE:

Dep. Prev. Med., Harvard Med. Sch., Massachusetts Gen.

Hosp., Boston, MA 02114, USA

SOURCE:

BIOCHIM. BIOPHYS. ACTA., (1991) vol. 1085, no. 2,

pp. 201-208.

DOCUMENT TYPE:

Journal

FILE SEGMENT:

LANGUAGE:

English

SUMMARY LANGUAGE:

English

We measured phospholipase activities in both the microsomal and the cytosolic enriched fractions of rat alveolar macrophages by using exogenous arachidonic acid-labeled phospholipids. The largest release of arachidonic acid from PI occurred with the cytosolic fractions at pH 6 in . the presence of calcium. That hydrolysis involved a PLA sub(2), and a PLC followed by the action of a diacylglycerol and 2-monoacylglycerol lipases. The cytosol also contains a calcium-independent PLA sub(2) acting on PE.

L8

ACCESSION NUMBER:

TITLE:

SOURCE:

AB

ANSWER 258 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.

BIOTECHNO 1988:18171703

Lipolysis of LDL with phospholipase A.sub.2 alters the expression of selected apoB-100 epitopes and the

interaction of LDL with cells

**AUTHOR:** 

Kleinman Y.; Krul E.S.; Burnes M.; Aronson W.; Pfleger

B.; Schonfeld G.

Division of Atherosclerosis and Lipid Research, CORPORATE SOURCE:

Department of Medicine, Washington University School of Medicine, St. Louis, MO 63110, United States.

Journal of Lipid Research, (1988), 29/6

(729 - 743)

CODEN: JLPRAW ISSN: 0022-2275

Journal; Article DOCUMENT TYPE: United States COUNTRY:

English LANGUAGE: English SUMMARY LANGUAGE:

To assess the effects of perturbing the surface of low density lipoprotein (LDL) on the conformation of apoB-100, LDL (d 1.030-1.050 g/ml) isolated from normal subjects were treated with phospholipase A.sub.2 (PL-A.sub.2) for 0.5 to 15 min. The resulting P-LDL and concurrent LDL (C-LDL) incubated without PL-A.sub.2 were isolated by gel permeation chromatography. Approximately 50% of LDL-phosphatidylcholine was hydrolyzed in 2 min and .sim.85% in 5 min. Lysophosphatidylcholine compounds (LPC) and free fatty acids (FFA) accumulated during lipolysis but most of the LPC and all of FFA could be removed by adding FFA-free albumin to the lipolysis mixtures. Immunoreactivities of P-LDL and C-LDL were evaluated in competitive radioimmunoassays, using a library of anti-human LDL monoclonal antibodies directed against the major regions of apoB-100 (the T4, T3, and T2 thrombin fragments). One epitope defined by monoclonal antibody 465B6C3 and localized near the carboxyl end of the apoB-100 molecule became less immunoreactive (ED 50s increased); three other epitopes on the T2 fragment near the LDL receptor recognition site and four epitopes localized towards the middle (T3) and amino terminal (T4) regions did not change. Altered immunoreactivities were not related to LPC and FFA contents. Thus, the conformation of apoB-100 was selectively altered by phospholipolysis. The interactions of P-LDL with cultured fibroblasts were grossly altered: P-LDL were bound nonspecifically to fibroblasts of both normal and homozygous familial hypercholesterolemic subjects and P-LDL were not degraded. LPC and FFA retained in LDL did not explain these alterations, nor did changes of epitope expression near the LDL receptor recognition site. It is likely that the apoB-100 aberrant cell interaction is due to loss of surface phospholipids and 'uncovering' of core lipids that react nonspecifically with cell surface components.

L8

ANSWER 257 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.

ACCESSION NUMBER:

1990:20043446 BIOTECHNO

TITLE:

Apolipoprotein C-1 inhibits the hydrolysis by

phospholipase A.sub.2 of phospholipids in liposomes

and cell membranes

AUTHOR:

the substrate.

Poensgen J. Grunenthal GmbH, Aachen, Germany.

CORPORATE SOURCE: SOURCE:

Biochimica et Biophysica Acta - Lipids and Lipid

Metabolism, (1990), 1042/2 (188-192)

CODEN: BBLLA6 ISSN: 0005-2760

DOCUMENT TYPE:

Journal; Article

COUNTRY:

Netherlands

LANGUAGE:

English English

SUMMARY LANGUAGE:

A small polypeptide isolated from human serum inhibits the action of phospholipase A.sub.2 on dipalmitoylglycerol phosphocholine vesicles. Sequence analysis revealed the protein to be apolipoprotein C-1, a major component of very light-density lipoprotein. The inhibiting efficiency is increased by one order of magnitude after 10 min preincubation of the protein with the substrate, but not the enzyme. It also depends on the concentration of the phospholipid. IC.sub.5.sub.0 is about 0.5 .mu.M at 0.2 mM DPPC and 1 .mu.M at 1 mM DPPC. Apolipoprotein C-1 is also inhibitory in a more physiological system: in broken human leukemia cells (HL-60 cells) it inhibits the release by endogenous phospholipases of arachidonic acid from membrane phospholipids. The effective concentrations correspond to those found in the serum. It is concluded that apolipoprotein C-1 and similar phospholipid-binding proteins may act as phospholipase inhibitors by blocking the access to

rs

ACCESSION NUMBER:

ANSWER 254 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.

BIOTECHNO 1991:21275537

TITLE:

SOURCE:

Characterization of several phospholipase

activities and diacylglycerol/2-monoacylglycerol

lipases in rat alveolar macrophages

Errasfa M. AUTHOR:

CORPORATE SOURCE:

Dept. of Preventive Medicine, Harvard Medical School,

General Hospital, Boston, MA 02114, United States. Biochimica et Biophysica Acta - Lipids and Lipid

Metabolism, (1991), 1085/2 (201-208)

CODEN: BBLLA6 ISSN: 0005-2760

Journal; Article DOCUMENT TYPE:

Netherlands COUNTRY: English LANGUAGE: English

SUMMARY LANGUAGE: We measured phospholipase activities in both the microsomal and the cytosolic enriched fractions of rat alveolar macrophages by using exogenous arachidonic acid-labeled phospholipids. The microsomal fractions contain a neutral calcium-independent phospholipase A.sub.2 (PLA.sub.2) which acts on substrates phosphatidylcholine (PC) and phosphatidylinositol (PI), a calcium-independent PLA.sub.2 acting on phosphatidylethanolamine (PE), and a neutral calcium-dependent PI-specific PLC. The cytosolic fractions contain calcium-dependent phospholipases: PLA.sub.2 that hydrolyses PC at alkaline pH, and a neutral PI-specific phospholipase C (PLC). The largest release of arachidonic acid from PI occurred with the cytosolic fractions at pH 6 in the presence of calcium. That hydrolysis involved a PLA.sub.2, and a PLC followed by the action of a diacyglycerol and 2-monoacylglycerol lipases. The cytosol also contains a calcium-independent PLA.sub.2 acting on PE. Our investigation shows that rat alveolar macrophages possess a number of phospholipases, as well as diacylglycerol and 2-monoacylglycerol lipases. The above enzymes could play an essential role in the remodeling of membrane phospholipids in resting cells, and the generation of physiologically active lipids in activated cells.

ANSWER 250 OF 267 SCISEARCH COPYRIGHT 2003 THOMSON ISI

88:369870 SCISEARCH ACCESSION NUMBER:

THE GENUINE ARTICLE: P1047

ENZYMATIC MODIFICATION OF LOW-DENSITY LIPOPROTEIN

BY PURIFIED LIPOXYGENASE PLUS

PHOSPHOLIPASE-A2 MIMICS CELL-MEDIATED

OXIDATIVE MODIFICATION

SPARROW C P; PARTHASARATHY S; STEINBERG D (Reprint) AUTHOR:

UNIV CALIF SAN DIEGO, SCH MED, DEPT MED, DIV ENDOCRINOL & CORPORATE SOURCE:

METAB, M-013D, LA JOLLA, CA, 92093

COUNTRY OF AUTHOR:

JOURNAL OF LIPID RESEARCH, (1988) Vol. 29, No. SOURCE:

6, pp. 745-753.

DOCUMENT TYPE:

Article; Journal

FILE SEGMENT:

LIFE

LANGUAGE:

ENGLISH

REFERENCE COUNT:

ANSWER 251 OF 267 SCISEARCH COPYRIGHT 2003 THOMSON ISI

ACCESSION NUMBER:

87:583957 SCISEARCH

36

THE GENUINE ARTICLE: K4290

TITLE:

L8

ENZYMATIC MODIFICATION OF LOW-DENSITY-LIPOPROTEIN

BY PURIFIED LIPOXYGENASE PLUS

PHOSPHOLIPASE-A2

**AUTHOR:** 

SPARROW C P (Reprint); PARTHASARATHY S; STEINBERG D

UNIV CALIF SAN DIEGO, LA JOLLA, CA, 92093 CORPORATE SOURCE:

COUNTRY OF AUTHOR:

USA

CIRCULATION, (1987) Vol. 76, No. 4, pp. 478. SOURCE:

DOCUMENT TYPE:

Conference; Journal

FILE SEGMENT:

LIFE; CLIN ENGLISH

LANGUAGE: REFERENCE COUNT:

No References

ANSWER 252 OF 267 SCISEARCH COPYRIGHT 2003 THOMSON ISI L8

ACCESSION NUMBER:

87:502416 SCISEARCH

THE GENUINE ARTICLE: J8106

TITLE: .

ALPHA-LECITHIN - CHOLESTEROL ACYLTRANSFERASE DEFICIENCY -

LACK OF BOTH PHOSPHOLIPASE-A2 AND

ACYLTRANSFERASE ACTIVITIES CHARACTERISTIC OF HIGH-DENSITY-LIPOPROTEIN LECITHIN - CHOLESTEROL

ACYLTRANSFERASE IN FISH EYE DISEASE HOLMQUIST L (Reprint); CARLSON L A

AUTHOR: CORPORATE SOURCE:

KAROLINSKA INST, KING GUSTAV V RES INST, BOX 60004,

S-10401 STOCKHOLM 60, SWEDEN (Reprint); KAROLINSKA INST,

DEPT INTERNAL MED, S-10401 STOCKHOLM 60, SWEDEN; KAROLINSKA HOSP, S-10401 STOCKHOLM 60, SWEDEN

COUNTRY OF AUTHOR:

SWEDEN

SOURCE:

ACTA MEDICA SCANDINAVICA, (1987) Vol. 222, No.

1, pp. 23-26.

DOCUMENT TYPE:

Article; Journal

FILE SEGMENT:

LIFE; CLIN ENGLISH

LANGUAGE:

REFERENCE COUNT:

Г8

ANSWER 253 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.

ACCESSION NUMBER:

1991:21310648 BIOTECHNO

TITLE:

Factors affecting the ability of

glycosylphosphatidylinositol-specific phospholipase D

to degrade the membrane anchors of cell surface

proteins

AUTHOR:

Low M.G.; Huang K.-S.

CORPORATE SOURCE:

Rover Physiology Laboratories, Department of

Physiology, College of Physicians, New York, NY 10032,

United States.

Biochemical Journal, (1991), 279/2 (483-493)

CODEN: BIJOAK ISSN: 0264-6021

DOCUMENT TYPE:

Journal; Article United Kingdom

COUNTRY: LANGUAGE:

SOURCE:

English English

SUMMARY LANGUAGE: AB

Mammalian serum and plasma contain high levels of glycosylphosphatidylinositol-specific phospholipase D (GPI-PLD). Previous studies with crude serum or partially purified GPI-PLD have shown that this enzyme is capable of degrading the GPI anchor of several purified detergent-solubilized cell surface proteins yet is unable to act on GPI-anchored proteins located in intact cells. Treatment of intact ROS17/2.8, WISH or HeLa cells (or membrane fractions prepared from them) with GPI-PLD purified from bovine serum by immunoaffinity chromatography gave no detectable release of alkaline phosphatase into the medium. However, when membranes were treated with GPI-PLD in the presence of 0.1% Nonidet P-40 substantial GPI anchor degradation (as measured by Triton X-114 phase separation) was observed. The mechanism of this stimulatory effect of detergent was further investigated using .cents..sup.3H!myristate-labelled variant surface glycoprotein and human placental alkaline phosphatase reconstituted into phospholipid vesicles. As with the cell membranes the reconstituted substrates exhibited marked resistance to the action of purified

GPI-PLD which could be overcome by the inclusion of Nonidet P-40. Similar results were obtained when crude bovine serum was used as the source of GPI-PLD. These data indicate that the resistance of cell membranes to the action of GPI-PLD is not entirely due to the action of serum or membrane-associated inhibitory factors. A more likely explanation is that, in common with many other eukaryotic phospholipases, the action of GPI-PLD is restricted by the physical state of the phospholipid bilayer in which the substrates are embedded. These data may account for the ability of endothelial and blood cells to retain GPI-anchored proteins on their surfaces in spite of the high levels of GPI-PLD present in plasma.

ACCESSION NUMBER:

TITLE:

AUTHOR:

SOURCE:

ANSWER 254 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.

1991:21275537 BIOTECHNO

Characterization of several phospholipase

activities and diacylglycerol/2-monoacylglycerol

lipases in rat alveolar macrophages

Errasfa M.

CORPORATE SOURCE:

Dept. of Preventive Medicine, Harvard Medical School, General Hospital, Boston, MA 02114, United States. Biochimica et Biophysica Acta - Lipids and Lipid

Metabolism, (1991), 1085/2 (201-208)

CODEN: BBLLA6 ISSN: 0005-2760

DOCUMENT TYPE:

Journal; Article Netherlands COUNTRY: English English

LANGUAGE: SUMMARY LANGUAGE:

We measured phospholipase activities in both the microsomal and the cytosolic enriched fractions of rat alveolar macrophages by using exogenous arachidonic acid-labeled phospholipids. The microsomal fractions contain a neutral calcium-independent phospholipase A.sub.2 (PLA.sub.2) which acts on substrates phosphatidylcholine (PC) and phosphatidylinositol (PI), a calcium-independent PLA.sub.2 acting on phosphatidylethanolamine (PE), and a neutral calcium-dependent PI-specific PLC. The cytosolic fractions contain calcium-dependent phospholipases: PLA.sub.2 that hydrolyses PC at alkaline pH, and a neutral PI-specific phospholipase C (PLC). The largest release of arachidonic acid from PI occurred with the cytosolic fractions at pH 6 in the presence of calcium. That hydrolysis involved a PLA.sub.2, and a PLC followed by the action of a diacyglycerol and 2-monoacylglycerol lipases. The cytosol also contains a calcium-independent PLA.sub.2 acting on PE.

Our investigation shows that rat alveolar macrophages possess a number of phospholipases, as well as diacylglycerol and 2-monoacylglycerol lipases. The above enzymes could play an essential role in the remodeling of membrane phospholipids in resting cells, and the generation of physiologically active lipids in activated cells.

ANSWER 255 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.

ACCESSION NUMBER:

1991:21212993 BIOTECHNO

TITLE:

AUTHOR:

Conversion of pig pancreas phospholipase A.sub.2 by protein engineering into enzyme active against

Escherichia coli treated with the

bactericidal/permeability-increasing protein

Weiss J.; Wright G.; Bekkers A.C.A.P.A.; Van den Bergh

C.J.; Verheij H.M.

CORPORATE SOURCE:

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Journal of Biological Chemistry, (1991),

SOURCE:

266/7 (4162-4167)

CODEN: JBCHA3 ISSN: 0021-9258

DOCUMENT TYPE:

Journal; Article

United States

COUNTRY:

English

LANGUAGE:

English SUMMARY LANGUAGE: Phospholipases A.sub.2 (PLA-2) are conserved enzymes that can vary widely

in their activity toward certain biological targets. Activity of PLA-2 toward Escherichia coli treated with the bactericidal/permeabilityincreasing protein (BPI) of granulocytes has been detected only in ''Group II'' PLA-2 (lacking Cys.sup.1.sup.1-Cys.sup.7.sup.7) and correlates with overall basicity and the presence of a cluster of basic amino acids within a variable surface region near the NH.sub.2 terminus (including residues 6, 7, 10, 11, and 15). We now show that of five pancreatic PLA-2 (''Group I'' enzymes) tested from different species of mammals, the human enzyme that is most basic both globally (pI 8.7) and locally (Arg-6, Lys-7, and Lys-10) is active toward BPI-treated E. coli (.sim.1-2% activity of the most active Group II PLA-2) whereas the other four PLA-2 are essentially inactive (<0.1%). The cDNA of the pig pancreatic PLA-2 (pI 6.4; Arg-6, Ser-7, Lys-10) has been modified by site-specific mutagenesis and the wild-type and mutant PLA-2 have been expressed in and purified from either E. coli or Saccharomyces cerevisiae to determine more precisely the structural determinants of PLA-2 activity toward BPI-treated E. coli. The single substitution of lysine (or arginine) for Ser-7 transformed the pig pancreatic PLA-2 into an active enzyme toward BPI-treated E. coli possessing 25-50% the activity of the human PLA-2. Additional modifications to increase global basicity (increase in net charge up to +4) caused a further (up to 2-fold) increase in activity. All mutant PLA-2 still containing Ser-7 possessed little or no activity toward BPI-treated E. coli. Changes in activity toward BPI-treated E. coli were accompanied by parallel changes in enzyme binding to this target. In contrast, substitution of lysine (or arginine) for Ser-7 caused little or no alteration of enzyme activity toward either autoclaved E. coli or egg yolk lipoproteins indicating no major effects on the catalytic properties of the PLA-2. This study demonstrates directly the role of NH.sub.2-terminal basic residues in the action of PLA-2 on BPI-treated E. coli and suggests that these properties mainly facilitate PLA-2 binding to this biological target.

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ANSWER 256 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. BIOTECHNO 1991:21064584

ACCESSION NUMBER: TITLE:

Behaviour of phospholipase modified-HDL towards cultured hepatocytes. II. Increased cell cholesterol

storage and bile acid synthesis

AUTHOR:

Collet X.; Vieu C.; Chap H.; Perret B.-P.

CORPORATE SOURCE:

INSERM Unite 326, Hopital Purpan, 31059 Toulouse Cedex,

Biochimica et Biophysica Acta - Lipids and Lipid SOURCE:

Metabolism, (1991), 1081/2 (211-219)

CODEN: BBLLA6 ISSN: 0005-2760

Journal; Article DOCUMENT TYPE:

COUNTRY: LANGUAGE: Netherlands

English English SUMMARY LANGUAGE:

Human total HDL (hydrated density 1.070-1.210), HDL.sub.2 (1.070-1.125),

HDL.sub.3 (1.125-1.210) or HDL separated by heparin affinity

chromatography were treated with or without purified phospholipase A. sub. 2 from Crotalus adamanteus. Control and treated HDL were reisolated and were then incubated with cultures hepatocytes. 1. Mass measurements evidenced a time-dependent cholesterol enrichment in hepatocytes cultured in the absence of lipoproteins. Addition of HDL.sub.2 still enhanced by 25% the cell cholesterol content and down-regulated endogenous sterol synthesis in similar proportions. Conversely, HDL.sub.3 slightly decreased the amount of free cholesterol in hepatocytes (-12%). 2. Incubations with phospholipase A.sub.2-treated HDL resulted in a 35%-50% increase of both the cellular cholesterol esterification and the cholesterylester accumulation, when compared to cells cultured in the presence of control-HDL. This effect was observed with HDL.sub.2, HDL.sub.3 and combining the data with all subfractions. 3. Cultured hepatocytes secreted cholic and .beta.-muricholic acids as major bile acids and HDL.sub.2 showed a tendency to stimulate their secretion. Phospholipase treatment of HDL again induced an increased production by hepatocytes of those two bile acids. Thus, whereas HDL.sub.2 and HDL.sub.3 display different behaviours with respect to cell cholesterol content, neosynthesis and bile acid secretion, their modifications by phospholipases always orientate the cell sterol metabolism in the same direction: increased cholesterylester accumulation and bile acid production.

ANSWER 257 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. BIOTECHNO

1990:20043446 ACCESSION NUMBER:

Apolipoprotein C-1 inhibits the hydrolysis by TITLE:

phospholipase A.sub.2 of phospholipids in liposomes

and cell membranes

Poensgen J. AUTHOR:

Grunenthal GmbH, Aachen, Germany. CORPORATE SOURCE:

Biochimica et Biophysica Acta - Lipids and Lipid SOURCE:

Metabolism, (1990), 1042/2 (188-192)

CODEN: BBLLA6 ISSN: 0005-2760

DOCUMENT TYPE: Journal; Article

Netherlands COUNTRY: English LANGUAGE: English

SUMMARY LANGUAGE: A small polypeptide isolated from human serum inhibits the action of phospholipase A.sub.2 on dipalmitoylglycerol phosphocholine vesicles. Sequence analysis revealed the protein to be apolipoprotein C-1, a major component of very light-density lipoprotein. The inhibiting efficiency is increased by one order of magnitude after 10 min preincubation of the protein with the substrate, but not the enzyme. It also depends on the concentration of the phospholipid. IC.sub.5.sub.0 is about 0.5 .mu.M at 0.2 mM DPPC and 1 .mu.M at 1 mM DPPC. Apolipoprotein C-1 is also inhibitory in a more physiological system: in broken human leukemia cells (HL-60 cells) it inhibits the release by endogenous phospholipases of arachidonic acid from membrane phospholipids. The effective concentrations correspond to those found in the serum. It is concluded that apolipoprotein  $\tilde{C-1}$  and similar phospholipid-binding proteins may act as phospholipase inhibitors by blocking the access to the substrate.

ACCESSION NUMBER:

TITLE:

BIOTECHNO 1988:18171703

Lipolysis of LDL with phospholipase A.sub.2 alters the

expression of selected apoB-100 epitopes and the

interaction of LDL with cells

**AUTHOR:** 

SOURCE:

Kleinman Y.; Krul E.S.; Burnes M.; Aronson W.; Pfleger

B.; Schonfeld G.

CORPORATE SOURCE:

Division of Atherosclerosis and Lipid Research, Department of Medicine, Washington University School

of Medicine, St. Louis, MO 63110, United States.

Journal of Lipid Research, (1988), 29/6

(729 - 743)

CODEN: JLPRAW ISSN: 0022-2275

DOCUMENT TYPE:

Journal; Article

COUNTRY:

United States

LANGUAGE:

English

SUMMARY LANGUAGE:

English

To assess the effects of perturbing the surface of low density lipoprotein (LDL) on the conformation of apoB-100, LDL (d 1.030-1.050 g/ml) isolated from normal subjects were treated with phospholipase A.sub.2 (PL-A.sub.2) for 0.5 to 15 min. The resulting P-LDL and concurrent LDL (C-LDL) incubated without PL-A.sub.2 were isolated by gel permeation chromatography. Approximately 50% of LDL-phosphatidylcholine was hydrolyzed in 2 min and .sim.85% in 5 min. Lysophosphatidylcholine compounds (LPC) and free fatty acids (FFA) accumulated during lipolysis but most of the LPC and all of FFA could be removed by adding FFA-free albumin to the lipolysis mixtures. Immunoreactivities of P-LDL and C-LDL were evaluated in competitive radioimmunoassays, using a library of anti-human LDL monoclonal antibodies directed against the major regions of apoB-100 (the T4, T3, and T2 thrombin fragments). One epitope defined by monoclonal antibody 465B6C3 and localized near the carboxyl end of the apoB-100 molecule became less immunoreactive (ED 50s increased); three other epitopes on the T2 fragment near the LDL receptor recognition site and four epitopes localized towards the middle (T3) and amino terminal (T4) regions did not change. Altered immunoreactivities were not related to LPC and FFA contents. Thus, the conformation of apoB-100 was selectively altered by phospholipolysis. The interactions of P-LDL with cultured fibroblasts were grossly altered: P-LDL were bound nonspecifically to fibroblasts of both normal and homozygous familial hypercholesterolemic subjects and P-LDL were not degraded. LPC and FFA retained in LDL did not explain these alterations, nor did changes of epitope expression near the LDL receptor recognition site. It is likely that the apoB-100 aberrant cell interaction is due to loss of surface phospholipids and 'uncovering' of core lipids that react nonspecifically with cell surface components.

ANSWER 259 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.

ACCESSION NUMBER:

TITLE:

AUTHOR:

1985:16194720 BIOTECHNO The degradation of platelet-activating factor in the

plasma of a patient with familial high density

lipoprotein deficiency (Tangier disease)

Pritchard P.H.; Chonn A.; Yeung C.C.H.

CORPORATE SOURCE:

Department of Pathology, Shaughnessy Hospital Lipid Research Group, The University of British Columbia,

Vancouver, BC V6H 3N1, Canada. Blood, (1985), 66/6 (1476-1478)

SOURCE:

CODEN: BLOOAW

Journal; Article DOCUMENT TYPE: United States

COUNTRY: English

LANGUAGE: Platelet Activating Factor (PAF) (1-0-alkyl-2-acetyl sn-glycerol

3-phosphocholine) has been characterized by its ability to aggregate platelets at low concentrations and its profound hypotensive effects. There is evidence that the rate of catabolism of this compound in the plasma regulates its concentration. In humans, we and others have shown that a PAF acetylhydrolase is associated with low density lipoprotein (LDL). The LDL particle in the plasma of patients with Tangier disease is quite different from normal as its lipid core appears to be enriched with triacylglycerol. Thus, we have studied the potential of this abnormal lipoprotein to degrade PAF. The assay for PAF acetylhydrolase was based on the release of .sup.3H from PAF that was labelled in the acetate moiety of the sn-2 position. Tangier disease plasma had approximately 3.3-fold higher PAF acetylhydrolase activity (208 .+-. 9 nmol/min/mL) than controls (63 .+-. 18 nmol/min/mL). This increase was brought about by an increase in the Vmax (400 .+-. 40, Tangier disease; 54 .+-. 5, controls) and Km for PAF (120 .+-. 20 .mu.mol/L, Tangier disease; 28 .+-. 4 .mu.mol/L, controls). The activity appears to be a specific acetylhydrolase rather than a phospholipase A.sub.2 as preincubation of the substrate with 0 to 100 .mu.mol/L phosphatidylcholine did not affect the amount of .cents..sup.3H!acetate released. The role of PAF, and its degradation by LDL-bound PAF acetylhydrolase in the phenotypic expression of this patient with Tangier disease, is not known. However, this is the first patient so far described who has an increased ability to degrade PAF in the plasma.